

**DOE G 440.1-7A**

**Approved: 01-04-01**

**IMPLEMENTATION GUIDE**  
for use with  
**10 CFR Part 850,**  
**CHRONIC BERYLLIUM DISEASE**  
**PREVENTION PROGRAM**



**U.S. Department of Energy  
Washington, D.C. 20585**

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All Department Elements

**INITIATED BY:**  
Office of Environment, Safety and Health

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## FOREWORD

The Department of Energy (DOE) has established regulatory requirements for the Chronic Beryllium Disease Prevention Program (CBDPP) in Title 10 of the Code of Federal Regulations (CFR), Part 850 (10 CFR 850) [64 Federal Register (FR) 68854]. The rule, including its preamble, is available at—

<http://www.eh.doe.gov/be/webdoc4.html-ssi>

DOE has developed this Implementation Guide to assist line managers in meeting their responsibilities for implementing the CBDPP. This Guide is approved by the Office of Environment, Safety and Health and is available for use by all DOE/National Nuclear Security Administration (NNSA) elements and their contractors. Both Federal and contractor personnel at the Rocky Flats Environmental Technology Site, the Oak Ridge Y-12 site, and the Los Alamos National Laboratory have contributed much of the technical information and examples in this Guide. In addition, members of DOE's Beryllium Rule Executive Committee and their support staffs have provided valuable content and practical advice during the development of this Guide.

This Guide can serve as an effective tool in meeting the regulatory requirements of 10 CFR 850. It describes methods and techniques that DOE considers acceptable in complying with the regulation. Conformance with this Guide will provide reasonable assurance that the responsible employer has complied with the related regulatory requirements; however, 10 CFR 850 permits DOE/NNSA elements and contractors to employ other means to achieve compliance.

Both the understanding of chronic beryllium disease and the practices for effectively preventing it continue to evolve at a rapid rate. Therefore, DOE is requesting input for improving the CBDPP and this Guide. Comments (recommendations, additions, and deletions) and any pertinent data that may improve this document should be sent by letter to the Director, DOE Office of Worker Health and Safety (EH-5), U.S. Department of Energy, Washington, DC 20585, or by sending DOE's self-addressed Standardization Document Improvement Proposal Form (DOE F 1300.3), available on the web at—

<http://www.explorer.doe.gov:1776/pdfs/forms/1300-3.pdf>

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## ACRONYMS

ABIH	American Board of Industrial Hygiene
ACGIH	American Conference of Governmental Industrial Hygienists
AIHA	American Industrial Hygiene Association
ANSI	American National Standards Institute
ASME	American Society for Mechanical Engineers
AWE	Atomic Weapons Establishment
Be-LPT	beryllium lymphocyte proliferation test
CAIRS	Computerized Accident/Incident Reporting System
CBD	chronic beryllium disease
CBDPP	Chronic Beryllium Disease Prevention Program
CDC	Centers for Disease Control and Prevention
CFR	Code of Federal Regulations
CIH	Certified Industrial Hygienist
D&D	decontamination and decommissioning
DOE	Department of Energy
EPA	Environmental Protection Agency
ES&H	Environment, Safety, and Health
FECA	Federal Employees' Compensation Act
FEV	forced expiratory volume
FOIA	Freedom of Information Act
FR	Federal Register
FVC	forced vital capacity
HAZWOPER	Hazardous Waste Operations and Emergency Response
HEPA	high-efficiency particulate air
ISM	integrated safety management
LANL	Los Alamos National Laboratory
LLNL	Lawrence Livermore National Laboratory
MRP	medical removal protection
NIOSH	National Institute for Occupational Safety and Health
NNSA	National Nuclear Security Administration
NPE	negative-pressure enclosure
ORPS	Occurrence Reporting and Processing System
OSHA	Occupational Safety and Health Administration
OWCP	Office of Workers' Compensation Programs
PEL	permissible exposure limit
PPE	personal protective equipment
RCRA	Resource Conservation and Recovery Act
SAR	Safety Analysis Report
SEG	similarly exposed group
SOMD	Site Occupational Medical Director
TLV	threshold limit value
TRADE	Training Resources and Data Exchange
TWA	time-weighted average

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